

APPENDIX VIII

FEDERAL REGISTER NOTICE REQUEST FOR PUBLIC COMMENTS

DEPARTMENT OF COMMERCE

Technology Administration

Request for Comments on Electronics Recycling

AGENCY: Technology Administration, Department of Commerce

ACTION: Notice, Request for Comments

Summary

The Technology Administration (TA) publishes this notice to solicit comments on the following specific issues regarding electronics recycling:

- Definition of covered products;
- Collection and the role of government in collection;
- Financing collection, transportation and recycling; financing for orphan products; financing historic products versus future products; and the role of government, the electronics industry, and intermediaries in financing;
- The role of the federal government in creating a national recycling plan. This solicitation is intended to give those who were unable to comment at the September 21, 2004 roundtable on electronics recycling, entitled Technology Recycling: Achieving Consensus for Stakeholders, an opportunity to submit a statement regarding these issues.

Dates

Comments and statements should be received by the Technology Administration no later than October 27, 2004, in order to receive consideration.

Addresses

Electronic statements are preferred, but written comments will be accepted. Please submit your comments electronically to technologyrecycling@doc.gov either in Microsoft Word (specify version) or WordPerfect (version 5 or 6, specify version).

Paper submissions should include an electronic copy of the comments on a diskette in one of the formats specified above. Mail to Laureen Daly, Office of Technology Policy, Technology Administration HCHB 4817, 1401 Constitution Avenue, N.W., Washington, DC 20230.

FOR FURTHER INFORMATION CONTACT

Direct questions to technologyrecycling@doc.gov or call Laureen Daly at (202) 482-0336.

SUPPLEMENTARY INFORMATION

Background

The Technology Administration, Office of Technology Policy held a roundtable on September 21, 2004 entitled Technology Recycling: Achieving Consensus for Stakeholders, that included representatives of electronics manufacturers, retailers, recyclers, and environmental organizations. At the roundtable, participants discussed that:

- A list of products for recycling should be limited to a small number of items to start with, such as cathode ray tubes and flat panel monitors over a certain size, and have a timetable for expansion of the list;
- A collection process may include but should not mandate participation from retailers, local governments, manufacturers, and third parties;
- There exists several different financing models including extended producer responsibility and an advanced recovery fee, as well as financing the recycling of orphan products and transportation from collection to recyclers; and
- There exists a need for a national approach as opposed to a state-by-state approach. The purpose of the roundtable was to obtain information for a report on electronics recycling that will be released in 2005.

Request for Comments

The Office of Technology Policy of TA is soliciting comments on the following specific issues regarding electronics recycling:

- Definition of covered products;
- Collection and the role of government in collection;
- Financing collection, transportation and recycling, financing for orphan products, financing historic products versus future products, and the role of government, the electronics industry, and intermediaries in financing;
- The role of the federal government in creating a national recycling plan. This solicitation is intended to give those who were unable to comment at the roundtable an opportunity to submit a statement regarding these issues. Statements may propose a specific scenario or model for electronics recycling; give examples of existing programs in similar or unrelated areas that could serve as a model for an electronics recycling program; or comment on the pros and cons of existing or proposed models. TA is interested in specific scenarios that would enhance the competitiveness of U.S. industry and encourage conservation of resources.

We request, but do not require, that commentors provide their name, affiliation, and contact information and whether the comments represent the views of an individual or an organization. The Department reserves the right to use comments received, either partially or wholly, in subsequent reports or publications. Any comments become the property of the U.S. Department of Commerce.

Technology Administration

For further information on the roundtable and the report, check the www.technology.gov website under Events and Activities, September 21, 2004, Technology Recycling Roundtable.

Phillip J. Bond
Under Secretary of Commerce for Technology
[FR Doc.04-23499 Filed 10-20-04; 8:45am]

October 13, 2004



444 North Capitol Street, N.W.
Suite 315
Washington, D.C. 20001
202-624-5828 202-624-7875 fax
www.astswmo.org

October 27, 2004

Laureen Daly
Office of Technology Policy
Technology Administration HCHB 4817
U.S. Department of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Dear Ms. Daly:

The Association of State and Territorial Solid Waste Management Officials (ASTSWMO) appreciates the opportunity to provide comments regarding the issue of electronics recycling subsequent to the roundtable, "Technology Recycling: Achieving Consensus for Stakeholders" that was held by the Technology Administration on September 21, 2004. ASTSWMO is a national non-profit organization representing the managers of solid waste, hazardous waste, remediation, recycling/reduction/ minimization, and underground storage tank programs of the States and Territories. Our members are involved with State programs to regulate and manage electronic goods destined for disposal or recycling.

The growing concern over the potential vast quantity of consumer electronics destined for the disposal has promoted much debate, however, has yet to lead to a national solution. We think the crux of the electronics recycling issue is financing a recycling solution, specifically, by determining a method that is agreed to by the manufacturers of electronic goods. In the interim, States and local governments are left with the problem of e-waste disposal, but with no additional resources to meet that demand. In the absence of a national agreement to a financing system, State programs will, out of necessity, continue to have and to develop individual management and financing systems as they take action to manage their electronics waste streams. The growth in individual State requirements to address this problematic waste stream has come in response to the void of a national solution in this area. If the manufacturers could decide on a way to support the product stewardship of electronics, there would be little reason for aggressive individual State actions to manage e-waste. We find it necessary to emphasize this point given the industry concerns over multiple State solutions raised at the September 21st Commerce-sponsored meeting. There will be no national resolution of this waste management problem until the impasse over resources for recycling these wastes is resolved, and that can only be done with the full cooperation of those engaged in the manufacture and distribution systems ultimately responsible for effective product stewardship. We remain opposed to any unfunded mandate on government or taxpayer resources as a permanent solution for management of these wastes. States cannot be given any new responsibilities without commensurate federal funding.

We believe it is important to have national direction on the e-waste issue in order to break the current impasse. The federal government should focus its efforts on the selection and implementation of a national financing model for electronics recycling. For the most part, we think States have been generally amenable to either financing plan (an Advanced Recovery Fee (ARF) model or a Cost Internalization model) put forth by industry during the NEPSI process as long as the plan is workable. Obviously, those States that have already placed a statutory or regulatory solution into effect are concerned with protecting their existing, individual system and have a strong preference about the method. We think it is necessary that any federal model provide for protection of those existing State programs. We believe the federal government needs to take a leadership role now in order to put in place a workable, national solution to the financing issue.

Thank you for your consideration of our views.

Sincerely,

Stephen Hammond

Stephen Hammond
President, ASTSWMO

Technology Administration

Basel Action Network

Email Received 10/26/2004

October 26, 2004

Laureen Daly
Office of Technology Policy
Technology Administration HCHB 4817
1401 Constitution Avenue, N.W.
Washington, DC 20230

Dear Ms. Daly,

Thank you for this opportunity to comment on four areas requested regarding electronics recycling and the government's role. The Basel Action Network is a Seattle-based organization committed to global environmental justice, and we have played a key role in the past few years highlighting the results of irresponsible exporting of US electronic waste to China, the existence of international laws and norms which the US has largely ignored, and the need for upstream (manufacturer) solutions to the toxic waste problem. We believe that extended producer responsibility is the best policy tool to increase recycling and design for the environment, while shifting costs from taxpayers to manufacturers. In addition, we believe extended producer responsibility will help stop the current externalization of end-of-life costs to those least able to deal with them.

The Basel Action Network is a member of the Computer TakeBack Campaign (CTBC), and sits on the Steering Committee of CTBC, and we support a national electronics producer responsibility system that meets the three principles of the CTBC campaign: Take it back, make it clean, and recycle responsibly. A description of these principles can be found at <http://www.computertakeback.com/about/index.cfm> and http://www.computertakeback.com/about/ctb_platform.cfm. Another excellent guideline for a national program is the Extended Producer Responsibility Working Group's statement of principles and list of essential program elements. It can be found at <http://www.eprworkinggroup.org/>.

The following are BAN's specific comments on each of the four areas you have identified.

(1) Definition of covered products:

The program should cover all the electronics that are covered in the European Union's WEEE Directive. This includes a wide range of products that have a circuit board and plug, such as televisions, computers, refrigerators, stoves, toasters, hair dryers, radios, electronic tools, smoke detectors, etc.

The Federal Register indicates that roundtable participants suggested that a list of products for recycling should be limited to a small number of items to start with and have a timetable for expansion of the list. If a decision is made to initially start with a smaller list than included in the WEEE Directive, that list should include - at a minimum - the following:

- Computers
- Computer monitors including CRTs and flat screens
- Laptops
- All large and small peripherals related to computers
- Televisions
- All large and small peripherals related to TVs, including VCRs
- All Audio Visual equipment and related peripherals and similar devices
- Cell phones

All of the above should include products generated by all entities, including large and small businesses, institutions, governments, schools, charities, and residents.

(2) Collection and the role of government in collection:

The whole system (including collection, consolidation, transportation, reuse, recycling, and any necessary disposal) should be arranged and financed by individual manufacturers and/or through a Third Party Organization (TPO) made up of manufacturers. It should not be arranged or financed by the Federal government or local governments.

- It is likely that this type of system would result in individual manufacturers and/or a TPO contracting with a number of electronics processors throughout the country. There should be a guarantee that these processors provide environmentally sound processing without the use of prison labor and that no hazardous electronic waste (as defined by the Basel Convention) is exported to developing (non-OECD) countries.
- Those providing collection and transportation to the processors should receive a "collection incentive payment" to encourage a diversity of entities, who meet certain standards, to provide collection services to customers.
- The payment of the collection incentive should be available to any collector type that meets certain standards, including charities, private recycling businesses, retailers, manufacturers, and government programs. No entity should be required to provide collection, but the payment system should be established such that it is beneficial to and desirable for many entities to do so.
- Alternately, BAN would also support a collection system arranged and financed by manufacturers who elect to partner with specific retailers or other entities as long as the system is free to the customer, convenient in both urban and rural areas, and does not result in an unfunded mandate to local governments.
- Local governments should not be put in the position of needing to collect and transport electronics without being adequately paid for doing so.
- The collection system must be convenient. It should be as easy to recycle a computer (TV, cell phone, etc.) as it is to buy one.

(3) Financing collection, transportation and recycling, financing for orphan products, financing historical products versus future products, and the role of government, the electronics industry, and intermediaries in financing:

- Each manufacturer (brand owner) should be individually responsible for financing the end-of-life collection, transportation, recycling, reuse and disposal of their future and historical products. This places responsibility on the party with the greatest ability to reduce the environmental and human health impacts of products – the brand owner.
- All costs for end-of-life management of products should be considered part of the manufacturer's regular cost of doing business and included in the price of the new product at the time of sale (cost internalization).
- This type of front-end financing gives manufacturers the feedback and financial incentive to design products that are less toxic and more easily recycled while creating markets for recycled materials derived from electronic products.
- Financing must be adequate to provide for an environmentally sound system not dependent on export of hazardous materials or use of prison labor.
- Financing must be adequate to provide for convenient collection in both urban and rural areas.
- Orphan products should be financed collectively by the industry, e.g. prorated by market share by electronic product type at the time the waste management costs are incurred.
- Recycling and reuse programs should not be funded with end-of-life user fees. These fees discourage return for recycling. In a 2002 survey of King County, Washington, citizens, it was found that when faced with a \$20 fee to recycle an old computer system, 34% of the respondents said they would store their computer at home instead of paying the fee. Another 4% admitted that they would put it in the garbage illegally. (See www.prrbiz.com/WCRC_Report2.pdf)
- Recycling and reuse programs should not be funded with advance recycling fees managed by federal or state governments. This type of a system would absolve manufacturers of any responsibility and therefore incentive to redesign, could need to be supplemented with taxpayer money, and could easily be raided for use in other government programs.

(4) The role of the federal government in creating a national recycling plan:

Technology Administration

- Because the NEPSI process has been unsuccessful in coming to a workable solution, individual states have needed to pass legislation to respond to the growing electronic waste problem. While this is an important temporary measure, BAN would strongly prefer an effective national system based on producer responsibility rather than a patchwork and partial state-by-state system.
- Pass federal producer responsibility legislation, similar to the WEEE directives in Europe, so that all competing producers within a product category are mandated to participate and meet the same high standards for collecting and recycling their electronic products. This will provide a level playing field for all manufacturers and ensure that there are no “free riders.”
- The federal legislation should also establish measurable collection and recycling rates and deadlines as well as reporting requirements to ensure an effective system. The federal government would report the results to the public, and regularly alter the rates to encourage increased volumes.
- Assist in providing education and promotion to the public of the issue, the new system and available opportunities.
- Ban the disposal of unprocessed covered electronic products and hazardous electronic waste in landfills and incinerators, including waste to energy facilities, across the country.
- Ban the export of hazardous electronic waste (as defined by the Basel Convention) to developing (non-OECD Basel) countries either for disposal or for recycling, so as not to violate recipient countries’ obligations under the Basel Convention not to trade in hazardous waste with a non-Party (e.g. the US) (Article 4, Paragraph 5).
- Alter the RCRA laws in order to implement the US’s legally binding obligations under the OECD treaty, to monitor and control the export of hazardous wastes, as defined by the Basel Convention.
- Either fully ratify the Basel Convention with all its decisions, including the Ban Amendment, or do not ratify the Convention at all.
- Assist in improving the regulatory environment to provide needed environmental safeguards and encourage success of the system/infrastructure.

Thank you for this opportunity to provide comments. Please feel free to contact me if you have questions or would like further input.

Sincerely,

Sarah Westervelt

Toxics Research Analyst
Basel Action Network
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www.ban.org

Email Received 10/26/2004

Dept. of Commerce:

You all might be very interested to note that in Japan, manufacturers have voluntarily set up a takeback system for another product -motorcycles. While voluntary would likely never happen here in the US, and therefore we need national legislation, it is important to understand that in more progressive cultures, there is a willingness by manufacturers to set front-end fees to provide "free" take back of their products at end of life. It's a good design. Thanks for looking at this.

Sarah Westervelt

Sarah Westervelt
Toxics Research Analyst
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Japan - motorcycle makers launch voluntary recycling system

Four Japanese motorcycles manufacturers (Honda Motor Co., Yamaha Motor Co., Suzuki Motor Co. and Kawasaki Motors Co.) and several major importers (including BMW Japan Corp. and Triumph Japan KK) launched a voluntary recycling system in Japan on October 1, 2004.

Japan for Sustainability reports that, under the system, a recycling fee will be added to the retail price and a recycling logo affixed to each new motorcycle. At the time of final disposal, motorcycles carrying the sticker will be recycled for free, while those without it will require a fee. Each maker is supposed to set and announce its own recycling charge, and Japan's four motorcycle makers have set it at 4,120 yen (about US\$38) including tax, regardless of engine displacement. When disposing of a motorcycle, the owner must either bring it to one of 190 designated locations around the country, or pay the transportation fee to have it sent to a designated location by one of 15,000 shops handling disposed motorbikes.

A total of 14 recycling facilities for final disposal will be established across the country. Sharing the recycling centers and the information management network with Japan's existing home appliance recycling system enabled the motorcycle makers to establish their recycling system quickly and operate it at low cost. Japan's Home Appliance Recycling Law entered into force in 2001, and it will be followed in 2005 by the Automobile Recycling Law, which requires the recycling of four-wheeled vehicles. The government decided not to make the recycling of motorcycles mandatory for various reasons, including the fact that their parts contain no chlorofluorocarbons (CFCs). But manufacturers decided to take voluntary action and start this new recycling system to deal with the illegal dumping of motorcycles, which has become a problem in Japan.

Beverley Thorpe
Clean Production Action
www.cleanproduction.org

Technology Administration

October 25, 2004

Office of Technology Policy
Technology Administration
1401 Constitution Avenue NW
Washington, DC 20230
Attn: Laureen Daly

Carroll County and Washington County, Maryland, are responding to the request for comments appearing in the October 21, 2004 issue of the Federal Register, 69 Fed. Reg. 61804-61805. We are primarily providing information regarding item (2), collection and the role of government in collection.

Frank Schaeffer, Deputy Director, Carroll County Department of Public Works, Venzana Legge, Carroll County Recycling Manager, and Harvey Hoch, Washington County Recycling Coordinator, provided the comments which are detailed below.

Franklin M. Johnson, Jr.
Director of Legislative Services
Carroll County, Maryland
225 N. Center Street
Westminster, MD 21157

Comments to Office of Technology Policy/Technology Recycling Roundtable

In general, Carroll County and Washington County join in recommending that manufacturers and producers, who have the ability to track products and can rely upon an effective distribution system, assume the lead role in any electronics recycling program. Local governments are struggling with a number of federal programs, regulations and mandates, many of which are unfunded or underfunded, and our local recycling programs, as part of our solid waste operations, already have limited funds with which to operate effectively. In addition, it is likely that any local program would have difficulty meeting the requirements of each producer, manufactured item and other stakeholders.

1. Current local programs. The Carroll County Department of Public Works reports that Carroll County has taken advantage of outside funding on four occasions in order to provide one-day electronics recycling events for residents. The first two events (April 27 & October 19, 2002) were funded by the Environmental Protection Agency and were administered through the Maryland Department of the Environment. These first two events included a drop-off location, staffing and materials (Gaylord boxes, shrink wrap and pallets). Two events followed through the Maryland Department of the Environment, in which those local governments participating paid 26% of the cost for transporting and recycling the collected materials, as well as a site and staffing for the events. The second two events were held on July 12, 2003 and June 5, 2004. The County collected a total of 52 tons of electronics from the above events.

Washington County further submits that several producer-responsibility programs currently in place seem to be functioning effectively. The Rechargeable Battery Recycling Corporation is one example, as well as examples provided by the market system – in which deposits are often required by auto parts vendors for return of “cores” and other recyclable parts.

2. State task force. Recognizing that electronic equipment is a growing part of the waste stream and that many components contain hazardous materials, the Maryland General Assembly passed legislation this year requiring the Maryland Department of the Environment to study possible implementation of a Statewide electronics waste collection system. The State was required to create task force with broad representation from environmental groups, local governments, electronics manufacturers, retailers, recyclers and the solid waste industry. The workgroup has met a number of times and will be working on a draft recommendation in November 2004.

The State task force has explored several options, including one that would be focused on producer responsibility. While the report is not final, both Ms. Legge from Carroll County, and Mr. Hoch from Washington County believe that producer responsibility is likely to be a critical component of the task force recommendations.

3. Options for Electronics Recycling. A number of projects for managing e-waste have taken place across the county and even internationally. These range from the one-day events in which Carroll County has participated, to producer take-back programs for their own products. Several states having passed legislation for managing electronic waste. Many

follow the example of the State of Maine, which has passed legislation making the manufacturers of electronic products responsible for managing the handling, recycling and disposal of the products.

The European Union (EU) passed a directive in 2003 requiring EU countries to pass laws forcing electronics manufacturers to take back and recycle up to 75% of the products that they sell in EU.

4. Recommendation. Many jurisdictions have very tight budgets and are simply unable to take the lead in paying for the collection and recycling of obsolete electronics. Local governments are unlikely to be familiar with the specialized requirements and specific hazards posed by some products. If communities are required to pick up after producers for disposal of products, producers will never have the incentive to produce durable, environmentally reusable and recyclable products. Employee training, staffing, safety, site management constraints and resources redirected from other solid waste goals are all among the concerns shared by Carroll and Washington Counties.

We share in suggesting that producers should take the lead to finance the collection, recovery and disposal of electronic waste resulting from their own products. Such private systems have worked in the past. Manufacturers are most familiar with the specialized requirements of the products they have produced. They have a reliable distribution system and existing infrastructure in place. And they will be most able to make functional use of the recycled parts.

The producers could fulfill this obligation either individually or by joining a collective scheme. Producers could share costs proportionately, and could defray costs by adding a fee to the price of a product. An effective regulatory approach could frame a system for e-waste collection and recycling that applies to all brand owners regardless of sales channels or ultimate end users.

Producers can take advantage of the existing infrastructures, such as using retailers as drop-off locations for their products. Producers could work with local electronics recyclers to set up collection sites and to recycle the collected materials. Producers could even work with local governments, if sites and staff are available, to establish collection sites and to set up agreements with local recyclers to haul and recycle the collected materials. These scenarios could be used as permanent drop-off sites or as special one-day events on an ongoing basis (i.e. monthly, quarterly, bi-annually) to fit the individual needs of each jurisdiction.

The fact is that currently there is no national incentive for manufacturers to take into account the end-of-life impact when they design products. By making them responsible for managing the end-of-life cycle of their products, the producers may have an incentive not only to recycle, but to manufacture a more environmentally friendly product, including phasing out hazardous substances; to make their products more reusable and recyclable.

Thank you for the opportunity to offer comments on this important issue. We would be happy to answer any questions you may have; our contact information is listed below.

Mr. Franklin Schaeffer
Deputy Director, Department of Public Works
Carroll County, Maryland
225 N. Center St.
Westminster, MD 21157

Ms. Venzana Legge
Carroll County Recycling Manager

Mr. Harvey Hoch
Washington County Recycling Coordinator

Technology Administration

City of Tacoma (WA) Waste Management

Email Received 10/26/2004

Ms. Daly:

Thank you for the opportunity to comment on the issues regarding electronics recycling. The City of Tacoma, second largest City in the State of Washington, has been waiting for three years for the NEPSI process to come up with a solution to the growing problem of unwanted and discarded electronics and we are still waiting. Last year, the City endorsed HB 2488 in the Washington State Legislature, a bill that required manufacturers of electronics products sold in Washington to come up with a plan to pay for the collection, transport and recycling of their products by 2006. This bill was amended to become a study bill to design such a system. I will be representing Washington cities on the stakeholder's committee that has been set up to look at the types of systems that exist and how they would work here in Washington State.

After following the NEPSI process and thinking about the various systems that exist, the City of Tacoma would support a system that had the following features:

Financing:

- Front-end Financing- covers the cost of collection, transport and recycling is included either in the price of the product or the fee is designated separately from the price and collected by the retailer for transfer to the Third Party Organization (TPO). The retailer should be allowed a handling fee for the payment transfer under either scenario.
- The fee needs to be adequate to cover the following:
 - provide for an environmentally sound system not dependent on export of hazardous materials or use of prison labor.
 - cover a base level of services available throughout the country (urban and rural)
 - encourage a diversity of entities to participate in providing easy and convenient collection opportunities to customers, who are not charged at end of life for the service.
 - Covered products that do not require a fee to safely recycle need not have a fee associated with them for recycling but will still need to be covered for the costs of collection and transportation.
- The fee needs to be held by the TPO not a government agency where it could be potentially be raided for other purposes.
- The intent of the fee is to provide an incentive to manufacturers to make their future products more reuseable, less toxic, and more recyclable, while creating markets for recycled materials derived from electronic products. Manufacturers would then compete on the amount of the fee which should result in the outcomes above.

Infrastructure:

- Those providing collection services should receive a "collection incentive payment" to encourage a diversity of entities, who meet certain standards, to provide collection services to customers. The collection incentive payment would best be paid to the collectors by the processors who are contracted with to provide environmentally sound, domestic processing.
- The payment of the collection incentive should be available to any collector type that meets certain standards, including charities, private recycling businesses, retailers, manufacturers, and government programs. No entity should be required to provide collection, but the payment system should be established such that it is beneficial to and desirable for many entities to do so.

Government Role: The role of each state and local government is to

- Pass enabling legislation as needed.
- Assist in providing education and promotion to the public of the issue, the new system and available opportunities.
- Assist in system and infrastructure design.
- Assist to improve regulatory environment to provide needed environmental safeguards and encourage success of the system/infrastructure.

- Where suitable and when reimbursed for costs with the collection incentive payment, voluntarily provide collection services as one component of a larger collection infrastructure provided by a diversity of entities.
- Participate in system oversight and ongoing improvement.

Covered Products: The system should cover the following electronic products

- CPU's, laptops, CRT monitors and all related large and small peripherals;
- Televisions and all large and small television related peripherals;

Whose products should be covered?

- Large and small businesses, institutions, governments, and residents.

Thanks for taking on this important work and for the opportunity to comment.

Bill Smith
Senior Environmental Specialist
City of Tacoma Solid Waste Management
3510 S. Mullen St.
Tacoma, WA 98409

www.cityoftacoma.org/solidwaste

"Never doubt that a small group of thoughtful, committed citizens can change the world.
Indeed it's the only thing that ever has." Margaret Mead

Technology Administration

Oct. 27, 2004

Laureen Daly
Office of Technology Policy
Technology Administration HCHB 4817
1401 Constitution Avenue, N.W.
Washington, DC 20230

Dear Ms. Daly,

Thank you for this opportunity to comment on specific issues regarding electronics recycling. Clean Production Action is a non-profit organization which advocates strategies that promote clean production in manufacturing processes and product design. To this end we have been researching Extended Producer Responsibility development for many years and attending the OECD workshops held in the late 1990's. As you are aware various states are developing their own take-back legislation which will result in different demands on industry. It is important that a level playing field be created and we recommend to this end that the US enact legislation similar to the WEEE Directive in the European Union – in particular the scope of electronic waste covered in the Annexes to the Directive. We have evidence that the WEEE Directive is comprehensive in scope, allows companies to accept their collective responsibility for historic and orphan waste while allowing companies the flexibility to set up their own collection and recycling systems for products put on the market as of 2006. We are firm supporters of individual responsibility for new products as we believe this provides the incentive for design changes in the future as well as creating the most efficient cost structure to handle future waste. To guarantee costs are covered in future and orphan waste becomes a thing of the past, each manufacturer should provide money into an insurance or dedicated fund.

Unfortunately we have witnessed the passing of SB-20 in California which puts the onus on the state government to set the fee, collect the e-waste and then organize its recycling. This locks companies into a system where cost savings from design change cannot be realized, where costs can not be controlled through a competitive recycling market and where fees will probably be insufficient to meet the actual costs. The latter has been the case in Japan where consumers pay a back end fee to have their end-of-life equipment recycled but the fee is recognized as too low for the actual costs. In this case the manufacturers cover the difference, whereas in California it will be the taxpayers who will most probably have to cover the deficit. This is not producer responsibility – nor is it shared responsibility – since companies have no involvement or liability in the program.

State governments are facing the largest deficit since World War II and should not have to face the burden of e-waste collection and recycling. As the OECD notes: EPR shifts the cost from the taxpayer to the consumer which is a fair and just system. A front end fee put on new products to cover the cost of waste recycling is, of course, the financial system used in current EPR systems in Europe. Should this be visible or invisible is up for debate but we recommend that the visible fee be allowed only for the period in which historic and orphan waste will enter the system and these costs should be borne by manufacturers proportionate according to their market share when the costs are incurred. For new product waste an invisible front end fee should be adopted. It is crucial that individual brand name companies be allowed to decrease their costs through design change or through creating alliances with other companies to collectively set up a system to handle their own brand name products. Companies know that Radio Frequency Identification will be the common form of product ID within the next few years allowing brand name owners to quickly identify their products when collected. For this reason it is imperative that the system be run by industry; not by the government, if such flexibility and opportunity for cost effectiveness through a competitive system is to occur.

The role of government should be to pass mandatory legislation to cover all producers and importers under the scheme, and provide oversight and enforcement of state of the art recycling standards. In particular it should ensure that e-waste is not exported to developing countries where occupational, environmental and oversight standards are not in place or even assured. As well, the domestic infrastructure for e-waste recycling is under-utilized. At the recent Take-It-Back conference in 2004 the recycling industry of America pointed out that they are far below capacity and calculated they could accept all US e-waste with some upscaling needed. The employment benefits are obvious – which is why we also support the Computer Take-Back campaign's position against prison labor. Retailers should accept their responsibility and take back 'old for new' products. Reverse logistics are used in Europe where EPR for e-waste has been enacted for a few years. Here the producers are responsible for collecting this waste from retailers in a timely manner and transporting it to centralized collection points for ongoing recycling and processing. Whatever the collection system, it must be free to the last owner, convenient in both urban and rural areas, and does not result in an unfunded mandate to local governments.

We recently published a manual to help governments implement comprehensive take-back systems and this is available on our website (www.cleanproduction.org) under our publication section. In this resource we outline a comprehensive list of criteria that must be integrated into any mandatory legislation. We wish to submit this as background information to this letter and will mail a copy to you as part of our official input.

For more information please contact me at Bev@cleanproduction.org. We look forward to hearing the results of this stakeholders participation.

Yours sincerely

Beverley Thorpe
International Director
Clean Production Action

Technology Administration

Oct. 27, 2004

Laureen Daly
Office of Technology Policy
Technology Administration HCHB 4817
1401 Constitution Avenue, N.W.
Washington, DC 20230

Dear Ms. Daly,

I am writing to include some comments regarding electronics recycling. Clean Water Action is a national citizens organization working for clean, safe, and affordable drinking water, prevention of health-threatening pollution, and creation of environmentally safe jobs and businesses. Our offices in Massachusetts and Rhode Island have been working on the issue of electronic waste at the state level for over two years, and we believe that extended producer responsibility (also called “producer take back”) is the best policy tool to increase electronics recycling and design for the environment, while shifting costs from taxpayers to manufacturers and consumers. Local governments state-wide are suffering from budget cuts, and the costs for properly collecting and recycling electronics is an expense that many cities and towns can not afford to bear in the long-term. Producer Take Back not only provides an incentive for electronics manufacturers to re-design their products to be non-toxic, more durable, and easier to recycle, but also can provide some much-needed financial relief to municipalities and taxpayers .

Clean Water Action is a member of the Computer TakeBack Campaign (CTBC), and we support a national electronics producer responsibility system that meets the three principles of the CTBC campaign: Take it back, make it clean, and recycle responsibly. A description of these principles can be found at <http://www.computertakeback.com/about/index.cfm> and http://www.computertakeback.com/about/ctb_platform.cfm. Another excellent guideline for a national program is the Extended Producer Responsibility Working Group’s statement of principles and list of essential program elements. It can be found at <http://www.eprworkinggroup.org/>.

The following are Clean Water Action’s specific comments on each of the four areas you have identified.

(1) Definition of covered products

- The program should cover all the electronics that are covered in the European Union’s WEEE Directive. This includes a wide range of products that have a circuit board and plug, such as televisions, computers, refrigerators, stoves, toasters, hair dryers, radios, electronic tools, smoke detectors, etc.
- The Federal Register indicates that roundtable participants suggested that a list of products for recycling should be limited to a small number of items to start with and have a timetable for expansion of the list. If a decision is made to initially start with a smaller list than covered in the WEEE Directive, that list should include - at a minimum - the following:
 - Computers
 - Computer monitors including CRTs and flat screens
 - Laptops
 - All large and small peripherals related to computers, including multi-functional devices
 - Televisions
 - All large and small peripherals related to TVs, including VCRs
 - Cell phones
- All of the above should include products generated by all entities, including large and small businesses, institutions, governments, schools, charities, and residents. This is critical to meeting the needs of all parties with regard to the management of electronics, and it will serve to create a sufficient economy of scale for a national program to function.

(2) Collection and the role of government in collection:

- The whole system (including collection, consolidation, transportation, reuse, recycling, and any necessary disposal) should be arranged and financed by individual manufacturers and/or through a Third Party Organization (TPO) made up of manufacturers. It should not be arranged or financed by the Federal government or local governments.
- It is likely that this type of system would result in individual manufacturers and/or a TPO contracting with a number of electronics processors throughout the country. There should be a guarantee that these processors provide environmentally sound processing without the use of prison labor and that no hazardous electronic waste is exported to developing countries.
- Those providing collection and transportation to the processors should receive a "collection incentive payment" to encourage a diversity of entities - who meet certain standards - to provide collection services to customers.
- The payment of the collection incentive should be available to any collector type that meets certain standards, including charities, private recycling businesses, retailers, manufacturers, and government programs. No entity should be required to provide collection, but the payment system should be established such that it is beneficial to and desirable for many entities to do so.
- Alternately, Clean Water Action would also support a collection system arranged and financed by manufacturers who elect to partner with specific retailers or other entities as long as the system is free to the customer, convenient in both urban and rural areas, and does not result in an unfunded mandate to local governments.
- Local governments should not be put in the position of needing to collect and transport electronics without being adequately paid for doing so.
- The collection system must be convenient. It should be as easy to recycle a computer (TV, cell phone, etc.) as it is to buy one.
- Local and state governments, along with manufacturers, will have a role to play in helping promote collection and recycling systems to residents.

(3) Financing collection, transportation and recycling, financing for orphan products, financing historical products versus future products, and the role of government, the electronics industry, and intermediaries in financing

- Each manufacturer (brand owner) should be individually responsible for financing the end-of-life collection, transportation, recycling, reuse and disposal of their future and historical products. This places responsibility on the party with the greatest ability to reduce the environmental and human health impacts of products – the brand owner.
- All costs for end-of-life management of products should be considered part of the manufacturer's regular cost of doing business and included in the price of the product at the time of sale (cost internalization).
- This type of front-end financing gives manufacturers the feedback and financial incentive to design products that are less toxic and more easily recycled while also creating markets for recycled materials derived from electronic products.
- Financing must be adequate to provide for an environmentally sound system not dependent on export of hazardous materials or use of prison labor.
- Financing must be adequate to provide for convenient collection in both urban and rural areas.
- Orphan products should be financed collectively by the industry, e.g. prorated by market share by electronic product type at the time the waste management costs are incurred.
- Recycling and reuse programs should **not** be funded with end-of-life user fees. These fees discourage return for recycling.
- Recycling and reuse programs should **not** be funded with advance recycling fees managed by federal or state governments. This type of a system would absolve manufacturers of any responsibility, could need to be supplemented with taxpayer money, and could easily be raided for use in other government programs.

(4) The role of the federal government in creating a national recycling plan

Because the NEPSI process has been unsuccessful in coming to a workable solution, individual states have passed - and will continue to pass - legislation to respond to the growing electronic waste problem. However, Clean Water Action would strongly prefer a national system based on producer responsibility rather than a patchwork and partial state-by-state system. The following are some components of an expanded federal role.

Technology Administration

- Pass federal producer responsibility legislation so that all competing producers within a product category are mandated to participate and meet the same high standards. This will provide a level playing field for all manufacturers and ensure that there are no “free riders.”
- The federal legislation should also establish measurable rates and deadlines as well as reporting requirements to ensure an effective system. The federal government would report the results to the public.
- Assist in providing education and promotion to the public on the issue, the new system and available opportunities.
- Ban the disposal of unprocessed covered electronic products and hazardous electronic waste in landfills and incinerators
- Ban export of hazardous electronic waste to developing countries either for disposal or for recycling.
- Assist in improving the regulatory environment to provide needed environmental safeguards and encourage success of the system/infrastructure.
- Expand federal agency and facility participation in environmentally preferable purchasing of electronics, support of use-phase conservation strategies, and manufacturer take-back and proper management at end-of-life. Federal purchasing power could drive substantial design improvements in electronics manufacturing and end-of-life services.

Thank you for this opportunity to provide comments. Please feel free to contact me if you have any questions.

Sincerely,

Kara E. Reeve
Campaign Organizer
Clean Water Action Alliance of Massachusetts

STATE OF COLORADO

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Bill Owens
Governor

Rick Grice
Director

October 27, 2004

To: DEPARTMENT OF COMMERCE, Technology Administration

Re: Request for Comments on Electronics Recycling
Comments respectfully submitted on item number two.

“Collection and the role of government in collection”

Colorado has been addressing the issue of electronics recycling since 2001, with state-led initiatives, public and private collection events, and legislative activities. Colorado was also a leader in adopting the universal waste rule for electronic equipment. Because of our broad approach to this complex issue we feel we have in place a diversity of solutions that demonstrate local responses to a statewide concern.

The State of Colorado has a long history of supporting partnerships between public and private agencies and local government control. Most of our residents enjoy a quality of life that provides affordable public services and access for all to the benefits of modern living.

Colorado wishes to stress a few points that may not be represented by other states. Colorado has within its borders very rural and poor remote areas, large wealthy urban areas and mountain resort communities. We are geographically and culturally diverse; any electronic waste solution must take these factors into consideration. Therefore, we are committed to local solutions that support partnerships between the public and the private sector.

We prefer to take advantage of local government’s understanding of how to best manage solid and hazardous waste (i.e., electronic waste) for its own communities. In the economically disadvantaged parts of Colorado where local government hasn’t been able to afford to fully bear costs of e-waste, local businesses have sprung up to meet this need. Often they are partnering with local governments, and are thriving. We would not support a policy that undermines these businesses. State research indicates that over 100 jobs have been created in electronics recycling in the past four years—in both the private and non-profit sectors.

Since collection of electronic waste must fit into a local, existing solid and hazardous waste system, while leveraging the efficiencies of the private sector, Colorado supports national strategies that favor public-private sector cooperation that encourage entrepreneurial efforts and assures equitable implementation for all citizens, regardless of location or income level.

Technology Administration

October 27, 2004

Laureen Daly
U.S. Department of Commerce
Office of Technology Policy
Technology Administration HCHB 4817
1401 Constitution Avenue, NW
Washington, DC 20230

VIA Electronic Mail
(technologyrecycling@doc.gov)

Re: Comments in Response to Federal Register Notice (69 Fed. Reg. 61804); Request for Comments on
Electronic Recycling (October 21, 2004)

Dear Ms. Daly:

Please find attached "Comments Submitted by CTIA to the Department of Commerce" in response to the above captioned matter, submitted by Willkie Farr & Gallagher, LLP, on behalf of CTIA – The Wireless Association™.

If you have any questions regarding this submittal, please contact us at the office.

Respectfully submitted,

- s -

Carolyn W. Conkling

- s -

Robert E. Fabricant

cc: Carolyn W. Brandon, CTIA

**Comments Submitted by CTIA to the Department of Commerce
in Response to Federal Register Notice (October 21, 2004)
Request for Comments on Electronic Recycling**

by

**Carolyn W. Brandon
Vice President, Policy**

on

October 27, 2004

CTIA – The Wireless Association™ hereby submits its comments in response to the above-captioned request for comments. CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the association covers Commercial Mobile Radio Service providers and manufacturers, including cellular and broadband, as well as providers and manufacturers of wireless data services and products.

CTIA is pleased to submit comments in support of a comprehensive, voluntary national program for the reuse and recycling of mobile phones and mobile devices. CTIA believes that state-by-state regulation is counter-productive to effectively managing e-waste. A one-size fits all national approach is also inherently flawed. The challenges faced by the wireless industry are unique based on the nature of the product and the market for mobile phone and mobile device reuse and recycling and, therefore, require a comprehensive, voluntary national approach, such as the industry's existing initiative, "Wireless... The New Recyclable."

I CTIA'S COMPREHENSIVE, VOLUNTARY REUSE AND RECYCLING PROGRAM

CTIA and its member companies are committed to the goal of sustainable development and environmentally sound management of wireless products at end-of-life. While not a problem today, the wireless industry has recognized that it must take active steps to preclude any future problems with the handling and management of mobile phones and mobile devices at their end-of-life.

a. "Wireless... The New Recyclable"

"Wireless... The New Recyclable" represents the wireless industry's commitment to the environmentally sound disposition of used wireless devices. The initiative was launched in October 2003 and provides a voluntary and uniform set of guidelines allowing manufacturers and carriers to upgrade the management of their environmental practices in the disposition of used wireless devices. This initiative was embraced and adopted by numerous of CTIA's members, including all of the national carriers and mobile phone manufacturers.

Wireless devices covered by the program include: wireless phone handsets, personal digital assistants (PDAs) that operate on wireless networks, wireless computer cards, accessories such as spare batteries, phone chargers, cables, headsets, earpieces, cases, clips and cradles.

The program guidelines incorporate all aspects of the recycling process: collection, transportation, re-use, refurbishment and materials reclamation. The specific elements of the program are:

Public Outreach and Awareness: CTIA and participating program members encourage consumers to recycle their "end-of-life" wireless products through a wide range of company initiatives and incentives. In particular, "Wireless . . . The New Recyclable" focuses the public's attention on the importance and ease of recycling wireless devices by 1) directing consumers to www.recyclewirelessphones.com, a central website that provides consumers with important information on the recycling of wireless products and links to CTIA member company sites which provide information on where consumers can recycle wireless phones; and 2) supplying the wireless industry with public awareness materials, such as posters and bill stuffers, to reinforce the message to recycle wireless devices.

CTIA Environmental Principles: Ten Principles that set forth the wireless industry's commitment to sustainable development and the proper management of wireless devices at their end-of-life.

Voluntary Guidelines: The Guidelines assist companies in ensuring that the wireless devices that are collected are managed, transported and reused, refurbished or recycled in a responsible way and in accordance with federal and state environmental laws. Promoting the reuse, refurbishment or recycling of wireless devices minimizes

waste destined for landfills or incineration. Importantly, the recycling guidelines facilitate the recovery of raw materials that are then used in the manufacture of new products.

b. Basel Network embraces CTIA Refurbishing Guidelines

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was launched in 1989 as an international response to transboundary dumping. In 2003, the Convention launched the Mobile Phone Partnership Initiative, a voluntary program comprised of mobile phone manufacturers, international operators of mobile phones and consumer advocates. As a participant to the working group on the Recovery and Recycling of End-of-Life Mobile Phones, CTIA was able to share its experience in developing useable guidelines for the refurbishing of wireless phones. The outcome of this activity was the Basel Network's adoption of a framework for developing a best practices document for recycling and refurbishing of wireless phones in countries that endorse the Basel Convention based in large part on CTIA's refurbishing guidelines.

The Basel Guidelines have now been finalized and recently adopted by the governing board. These guidelines, along with CTIA's, create a unified policy on how the refurbishing of wireless phones will be handled throughout most of the world. This is significant because the process ensures that phones put back into the marketplace for reuse continue to meet applicable regulatory standards on performance and safety. In addition, while the United States government has not endorsed the Basel Convention, the U.S. Environmental Protection Agency ("U.S. EPA") is aware that CTIA's guidelines have the broad support of the wireless industry and other stakeholders involved in the process of ensuring responsible refurbishment of wireless devices.

II. CELL PHONES ARE DIFFERENT FROM OTHER ELECTRONICS

A comprehensive, voluntary national approach to mobile phone and mobile device reuse and recycling, "Wireless... The New Recyclable," is the answer to the end-of-life issues raised by these devices. State-by-state regulation is not an effective or efficient answer, nor is a one-size fits all national approach. As discussed below, the challenges faced by the mobile phone and mobile device industry are unique based on the nature of the product and the market for mobile phone and mobile device reuse and recycling and, therefore, require a program specifically developed for the wireless industry.

a. Size and Portability

A key aspect of any reuse or recycling program is the collection of the product. The industry has been able to establish effective voluntary collection programs that are a function of the small size and portability of mobile phones and mobile devices. These voluntary programs include collection at municipal centers, return of products to service providers or other retailers, or mail in returns to manufacturers. The size and portability of most other electronics product do not practically or economically allow for this range of collection options. For example, Verizon Wireless has a program that collects cellular telephones in retail outlets and accepts the return of its products via mail through the charitable program, *HopeLine*SM; this program offers these collected products to help the victims of domestic violence. T-Mobile's *Give More, Get More* accepts used phones through the mail and donates 100% of the recycling proceeds to charitable organizations. Cingular, Nextel, and Sprint also collect previously used wireless phones and donate either the refurbished phones or the proceeds from the programs to charitable organizations. Finally, The Wireless Foundation, a charitable organization created by the membership of CTIA, has sponsored collection events and charitable programs, such as *Donate-a-Phone*®.

The electronics industry represents a diversity of products and environmental end-of-life challenges. Not all electronics are the same. Wireless phones, which are measured in ounces, are simply not the same as flat screen televisions, which are measured in tens or hundreds of pounds; these products do not present the same kind of environmental issues nor require the same solutions for effective end-of-life management and disposal and, therefore, should not be forced into a one-size fits all program.

b. New Products, Reduced Potential Environmental Impacts

As mobile phone and mobile device manufacturers comply with the European Union's Restriction of Hazardous Substance (RoHS) Directive, we also anticipate the phase out of contaminants in mobile phones or mobile devices marketed in the United States. We anticipate that the design changes required for sale in or import to the European Union will also be applied to products marketed and sold in the United States. Such design changes will encourage recycling and reuse and further reduce any potential environmental impacts from the disposal of mobile phones or mobile devices. Specifically, the RoHS directive requires the substitution of various heavy metals (lead, mercury, cadmium, and hexavalent chromium) and brominated flame retardants (polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE)) in new electrical and electronic equipment to be put on the market starting from July 1, 2006.

c. Markets exist for used mobile phones and mobile devices

The market for used mobile phones and mobile devices also is different from most of the electronics industry. Mobile phones or mobile devices have a relatively high reuse value creating an existing market for these devices; therefore, the market forces providing incentives to collect and reuse these devices would be more efficient than for other electronics products. This is evidenced by the current efforts of ReCellular and HOBI International, Inc., for-profit companies established to collect and refurbish used telephones for return to the market. The operation of for-profit companies is unusual in the electronics recycling and reuse market and is a clear indication of the strength of the market for wireless device reuse.

d. Close contact between consumers and service providers during mobile phone or mobile device replacement and monthly billing.

Unlike most electronics manufacturers and retailers, wireless service providers and consumers are typically in close contact during mobile phone or mobile device replacement and billing. This contact presents the opportunity for efficient and cost-effective collection. Many mobile phone or mobile device customers return to a service provider or independent agent to replace their devices. Moreover, through monthly billing, service providers are in communication with their customers. This readily available occasion for communicating reuse or recycling opportunities is not common to most other electronics industries.

Based on the unique nature of mobile phones and mobile devices and the market for their reuse and recycling, the wireless industry is able to support a wide range of efficient and effective collection, reuse and recycling programs. Other electronics products, such as televisions, computers and printers, simply cannot practically or economically support a similar system. Therefore, we support a comprehensive, voluntary national program specifically developed for the wireless industry. CTIA's program, "Wireless: The New Recyclable," provides this vehicle.

III. STATE-BY-STATE REGULATION IS UNWORKABLE

a. National stream of commerce warrants national recycling program

Mobile phones and mobile devices are a consumer product in national commerce best addressed at the national level. The reuse and recycling of these wireless devices present issues unlike those presented by traditional state solid waste management and disposal. Solid waste issues are typically characterized by 1) collection programs for municipal solid waste for disposal or 2) recycling programs for bulk products with marginal value that require removal from the waste stream at the local level and collection for recycling. As discussed above, mobile phone and mobile device reuse and recycling involves a valuable product with a focus on reuse and recycling. Therefore, a voluntary, industry-supported national program will facilitate the responsible recycling of wireless devices regardless of where the devices are purchased or where the devices wind up.

b. Inconsistent environmental and regulatory standards

The reuse and recycling of mobile phones and mobile devices is a national environmental challenge. We believe that state-by-state regulation is counter-productive and a one-size fits all national approach is not workable for the entire electronics industry. Rather, this challenge demands a comprehensive, voluntary national solution tailored to address the issues raised by mobile phone and mobile device end-of-life. Consumers and industry are already confronting inconsistent state requirements, as evidenced by the inconsistent take-back, financing and manufacturing requirements already enacted in California and pending in several other states, including Illinois, New York and Maine. Absent a definitive federal endorsement of a voluntary national recycling program, it seems certain that a piecemeal and inconsistent network of state regulatory programs will be the default solution. A state-by-state system would lead to regulatory uncertainty and confusion, high compliance costs, and the inefficient use of resources, all of which combined will lead to increased costs for consumers and a much less efficient and effective take-back program, especially for wireless providers and manufacturers that serve multiple markets.

c. State-by-state regulations would adversely affect consumers, industry and government

Wireless consumers will pay, either directly or indirectly, for inefficient and inconsistent state regulatory programs. As discussed above, the diversity and inconsistency of state programs not only results in an inefficient system, it also demands high compliance costs for industry. An increase in the total cost of the program will invariably result in a pass through of costs to the consumer and an increase in cost for the product.

State and local governments would be subjected to increased costs under a state-by-state regulatory regime. Regulatory systems simply cost more and states that choose to adopt such programs will incur potentially significant costs, at both the state and local level, to implement a mandatory regime, including costs of collection, administration, oversight and enforcement. Again, consumers will ultimately pay for these increased costs through local taxes.

Working with industry to promote product reuse and recycling on a national level will help the United States in its efforts to work with other nations in finding environmentally sound, effective, workable solutions to address the increasing volume of used wireless devices elsewhere. A piecemeal state-by-state approach will leave the United States without a strong basis for a leadership role in the international discussion on recycling issues.

The wireless industry supports a comprehensive, voluntary national program that reduces program costs, as compared to a regulatory system, and promotes shared responsibility with our federal, state and local governmental partners.

IV. VOLUNTARY PROGRAMS CAN BE MORE EFFECTIVE THAN MANDATED PROGRAMS

Voluntary, performance-based environmental programs have been proven effective over the last decade. Limitations on federal and state resources and the need to implement more efficient and effective environmental programs have resulted in a gradual, but necessary, shift to voluntary, performance-based environmental programs. Mobile phone and mobile device reuse and recycling is an environmental challenge that would benefit from such a program.

In the context of chemicals regulation, U.S. EPA developed the 33/50 Program. The 33/50 Program is an excellent example of a successful voluntary, performance-based program for the chemical industry. This program challenged chemical manufacturers to reduce the use of hazardous chemicals in their operations reducing the releases and transfers of 17 targeted chemicals by 50%. This program met its goal one year earlier than scheduled. Similar to CTIA's program, "Wireless... The New Recyclable," the goal of the 33/50 Program is to provide measurable environmental improvements without the need to establish a new regulatory system.

As discussed above, the wireless industry came together to address the national environmental challenges raised by end-of-life issues for mobile phones and mobile devices by adopting "Wireless... The New Recyclable" in a ten month period. A mandatory state or federal system takes years to produce results, including the passage of legislation, adoption of implementing regulations and defense of likely judicial challenges. Clearly, a comprehensive, voluntary national program could produce measurable environmental results over a much shorter period of time.

The effectiveness of a comprehensive, voluntary national program is further assured by the limited number of mobile phone and mobile device manufacturers and wireless service providers required to participate in the program. The high-level of industry participation in "Wireless... The New Recyclable" initiative serves to improve the effectiveness of the program.

V. THE U.S. EPA AND DEPARTMENT OF COMMERCE CAN PLAY AN IMPORTANT ROLE IN ASSISTING INDUSTRY TO TAKE THE LEAD ON PROMOTING PRODUCT STEWARDSHIP

U.S. EPA retains general authority for oversight of state solid waste programs. Subtitle D of the Resource Conservation and Recovery Act, 42 U.S.C. 6941-6949, authorizes U.S. EPA to require states to apply for and receive approval of their solid waste management programs. Specifically, U.S. EPA is provided with an oversight role and the authority to develop guidance to assist states with the development and implementation of their programs. As such, U.S. EPA plays a central role in shaping solid waste policy and practices throughout the nation.

U.S. EPA has an established record of support for comprehensive, voluntary reuse and recycling programs. U.S. EPA programs, such as “WasteWise” and the “Resource Conservation Challenge,” are good examples of government/industry partnerships designed to produce environmental results without the need for new regulation. U.S. EPA also developed “Plug-In to eCycling,” a program specifically designed to promote reuse and recycling in the electronics industry. CTIA member, AT&T Wireless has partnered with U.S. EPA under this program. Furthermore, in May 2004, U.S. EPA issued “Guidelines for Materials Management” under this program to provide “national guidance for the management of ‘end-of-life’ electronics.”

U.S. EPA has worked with states and industry for several decades in developing national markets for traditional recycled materials, such as aluminum, glass and paper. The Department of Commerce has expertise in technology and markets. We believe mobile phones and mobile devices demand a comprehensive, voluntary national program for reuse and recycling that takes into account the unique characteristics of mobile phones and mobile devices that are described herein and we are committed to working with U.S. EPA and the Department of Commerce to continue to promote industry’s initiative, “Wireless... The New Recyclable.”

VI. CONCLUSION

CTIA and its member companies are committed to the goal of sustainable development and environmentally sound management of wireless products at end-of-life. CTIA believes that state-by-state regulation is not an effective or efficient answer, nor is a one-size fits all national approach workable for the electronics industry because not all electronics are the same -- wireless phones are not the same as televisions and they do not present the same kind of environmental issues nor require the same solutions for effective end-of-life management and disposal. The challenges faced by the wireless industry are unique based on the nature of the product and the market for mobile phone and mobile device reuse and recycling and, therefore, require a comprehensive, voluntary national approach, such as CTIA’s initiative, “Wireless... The New Recyclable.” We look forward to working with the Department of Commerce and the U.S. EPA to enhance the wireless industry’s successful management of wireless products at end-of-life and to protect our environment.

Dell Inc. Response to Department of Commerce: Technology Administration Request For Comments on Electronics Recycling

Summary

Dell thanks the Department of Commerce for seeking input to address the challenges of electronics recycling. Dell is committed to providing easy-to-use and affordable recycling solutions to customers. The company believes that reuse is a key part of the product life cycle and provides a number of product recovery and reuse programs to consumer and business customers that were developed based on customer research. Dell manages environmental stewardship efforts with the same focus any other business process receives. Detailed information about Dell environmental stewardship programs can be found at www.dell.com/environment.

About Dell

Dell—through its direct business model—designs, develops, manufactures, markets, sells, and supports a wide range of computer products and services that are customized to customer requirements. These products include enterprise systems (servers, storage, networking products, and workstations), client systems (portable and desktop computer systems), software and peripherals, and service and support programs. Dell markets and sells its products and services directly to its customers, which include large corporate clients, governments, healthcare, and education accounts, as well as small-to-medium business and individual consumers. Dell is headquartered in Round Rock, Texas, and conducts operations worldwide.

Dell Responses to the Department's Specific Issues

(1) Definition of covered products:

An electronics recycling plan should focus on those products that contain environmentally sensitive materials. The economic models of recycling these products is more costly and there is minimum value in the recovered materials.

Regulations already exist for entities disposing large numbers of computers at one time. Because companies have these additional responsibilities for proper disposal of computer technology, including privacy compliance, Dell believes and is demonstrating that market driven solutions will be effective in meeting the challenge of collecting used electronics in this area.

(2) Collection and the role of government in collection:

Dell believes that industry can also lead the way in developing innovative collection solutions for consumers that leverage existing local government infrastructure as well as partnerships between industry and non-profit entities.

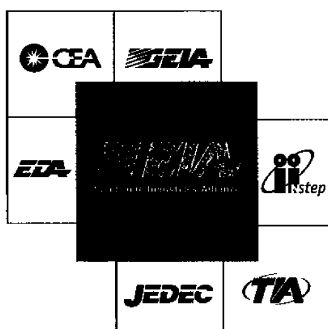
(3) Financing collection, transportation and recycling, financing for orphan products, financing historical products versus future products, and the role of government, the electronics industry, and intermediaries in financing:

Everyone has a role in addressing the challenge of reuse and recycling used electronics. Dell favors a shared responsibility approach that emphasizes innovative industry-led solutions, leverages existing local government infrastructure for collection and consolidation, and encourages consumer responsibility for proper disposal and reuse of used technology.

(4) The role of the federal government in creating a national recycling plan:

Dell recognizes the inefficiencies inherent in a patchwork of state legislation addressing these issues. The federal government could play a valuable role by encouraging electronics manufacturers to have comprehensive product recovery plans that make state legislation unnecessary.

Through tax incentives, government can encourage industry to implement innovative and comprehensive electronics recycling solutions. Tax incentives could also encourage reuse and refurbishment to keep computers productive and useful for as long as possible. This in turn can benefit non-profit organizations which may not be able to afford new technology. Only when the computer is past any useful life should recycling become a solution.



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EIA Comments on Department of Commerce Request on Electronics Recycling

The Electronic Industries Alliance (EIA) would like to thank the Department of Commerce for its continued interest in the issue of electronics recycling. EIA applauds the Department's recent roundtable on electronics recycling, at which the major challenges on this issue were highlighted. We believe that the roundtable offered an excellent platform for building on the work of EPA and the National Electronic Product Stewardship Initiative (NEPSI).

One of the points that EIA stressed at the roundtable was the need for a national program for electronics recycling. Our fear about a patchwork of state regulations has unfortunately come true, with California and Maine now looking to implement radically different programs. Our preference would be for voluntary industry action on innovative solutions that achieve the goal of increasing recycling. However, this inconsistent state action has led us to focus our efforts on creating a national system that will achieve the goal of increasing recycling while not impeding interstate commerce. We believe a sustainable national system will encourage the increased infrastructure necessary within the U.S. for a successful electronics recycling system.

There are three main reasons why the differences at the state level lead to serious negative impacts. First, electronics recycling requires a national market for used products, which will create efficiencies in the collection system and in the recycling industry. This will require interstate movement of collected products. Second, without a national program, there can be no level playing field for manufacturers, retailers, and consumers. Third, difference among state programs can cause confusion to the consumer on the need for recycling. We were encouraged to hear that all of the other participants at the roundtable shared this view that a national recycling program is preferable to the current state-by-state approach.

When it comes to electronics recycling, the high-tech industries are working to develop both short-term and long-term solutions that make sense. Over the past several years, our

COMMENTS TO THE DEPARTMENT OF COMMERCE THAT REFLECT THE INDUSTRY ARE:

companies and many others have been supporting or developing innovative recycling programs that are giving consumers many options for clearing out their closets of old equipment. Many of our companies were founding members of EPA's Plug-in to eCycling program, which is coordinating several pilot programs in different regions of the country. EIA's companies are also working to lessen the environmental impact of our industry's products over their entire lifecycle – from design, to use, to end of life. We believe that manufacturers can play a critical role 1) at the design phase, 2) by helping provide markets for recycled materials, and 3) by finding innovative solutions to environmental challenges.

In addition to voluntary recycling efforts, the industry is an active participant in NEPSI. The goal of NEPSI is to achieve consensus on an effective national system for electronics recycling that avoids piecemeal or conflicting state laws. As part of our commitment to the environment, EIA and member companies are working with NEPSI in a constructive manner. Within NEPSI, manufacturers have been working together to develop a framework for financing the nationwide recycling program that NEPSI will then recommend to Congress.

Below are EIA's recommendations on the four specific areas on which the Department requested comments.

(1) Definition of covered products;

EIA believes that any electronics recycling program must have a well-defined list of the products to be covered, regardless of the financing mechanism. In the initial stages of a comprehensive program, this list should be limited in scope so as not to overwhelm the new system. This list should be based on criteria such as the anticipated volume of products in need of recycling, cost of recycling those products, and the presence of environmentally sensitive materials. In the EIA discussions on national recycling legislation, we would currently recommended a product scope that only included computer monitors, portable computers, and televisions with video displays having a viewable area greater than nine inches when measured diagonally.

Within this list, it is important to recognize the differences in devices that are included as a piece of larger equipment. In order to avoid confusion about which products are intended to be covered, EIA recommends that the list of covered devices include specific exemptions for products that are a part of motor vehicles, industrial equipment, medical equipment, household appliances (i.e. clothes washer, clothes dryer, refrigerator, etc.), and other commercial equipment.

Another factor to consider when defining a list of covered devices is whether the program applies to household products exclusively, or to household and business products. The focus in NEPSI was on household products, which pose different collection challenges than business products. However, we have reexamined this issue within the EIA discussions due to difficulty in distinguishing between household and business products on both the front end and in the waste stream. Some companies do not see a reasonable

mechanism to limit the products so that businesses do not take advantage of the system in place for household products. This is a particularly difficult challenge if an advance recovery fee is assessed at the time of sale, and businesses are exempt from the fee if they purchase a certain number of products in one transaction. The counterargument to including all sales is that many businesses are currently obligated to recycle their used electronics due to state or federal waste laws, and many vendors currently offer takeback services as part of the purchasing contract.

(2) Collection and the role of government in collection;

Local government should have the primary responsibility for collection and should engage other local actors such as non-profit organizations, retailers, and recyclers. These stakeholders have the experience and knowledge in developing efficient and practical waste management options for their particular area. Any national program must take into account the expertise of local officials, and offer them incentives to establish effective collection strategies that minimize the cost per pound of products collected. With the proper financing and incentives in place, it would not be necessary or desirable to mandate that any stakeholder undertake collection activities.

(3) Financing collection, transportation and recycling, financing for orphan products, financing historical products versus future products, and the role of government, the electronics industry, and intermediaries in financing; and

Individual member companies differ on the correct approach to financing electronics recycling. However, all companies look for a fair, economically sustainable and environmentally sound approach to this complex issue. A level playing field is one of the key elements of fairness that EIA strives to achieve in this type of situation. Due to the conflict within the industry on the correct approach to financing, EIA will not take a position on financing at this time. However, we have provided below a short description of the program on which we are currently working. Our companies have not yet approved this tentative compromise, but we offer the outline that has been previously provided to NEPSI stakeholders. This approach would cover financing the collection, transportation, and recycling of orphan, historic, and future covered products.

(4) The role of the federal government in creating a national recycling plan.

As mentioned above, EIA strongly supports the development of a national program for electronics recycling. Because the industry and other stakeholders require a level playing field in order to participate in the system, EIA believes that federal legislation is necessary to implement this national program. A working group of manufacturers within EIA is currently developing draft federal legislation that would establish a national program. Federal government input and support of the national program will be a necessary component to successful passage and implementation.

Technology Administration

Within the federal legislation, EIA envisions a role for a federal government agency or agencies to set the necessary ground rules and enforce them. The federal government would also need establish and enforce environmentally sound management guidelines for recycling activities.

Beyond the legislative requirements, there are numerous positive actions that the federal government could take to assist in the creation of a national recycling plan. Many states have taken the lead in establishing electronics recycling programs and holding local collection events. However, there are many states that have not taken any action. There should be a concerted effort to help these states establish the necessary infrastructure prior to implementation of a national program. During NEPSI, a working group developing a list of actions to be taken in the “interim period” before the passage of federal legislation, including the creation of a “National Coordinating Entity” to offer support to the states and communities that express an interest in developing or enhancing their electronics recycling infrastructure. The federal government can assist in these activities and ensure that the recommended actions are taken.

Another area where the federal government can help spur the advancement of a national recycling program is in the development of markets for recycled materials. Without viable markets for these materials, it will be difficult to develop a sustainable national model for electronics recycling. The federal government has experience in market development activities, and agencies can put this experience to work in finding and promoting an efficient market for recycled commodities from used electronics.

Conclusion

EIA would again like to thank the Department for initiating this effort on an issue of vital important to the high tech industry. We hope that by working together, the industry, government, and other stakeholders can find a practical way to deal with the challenge of recycling used electronics. We need strong leadership at the federal level in order to accomplish this goal, and the Department’s actions are a step in the right direction.

Sincerely,



Dave McCurdy
President

GLOBAL INVESTMENT RECOVERY, INC.

5409 E. Henry Avenue
Tampa, Florida 33610-4844
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October 22, 2004

Ms. Lauren Daly
Office of Technology Policy
Technology Administration
U.S. Department of Commerce
HCHB – Room 4817
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Via Email: technologyrecycling@doc.gov

Subject: REPLY COMMENTS:

Technology Administration, Department of Commerce
Notice, Request For Comments
September 21, 2004 Roundtable: Technology Recycling:
Achieving Consensus for Stakeholders

Dear Ms. Daly:

Global Investment Recovery, Inc. (“Global”) respectfully submits to the Office of Technology Policy these reply comments in connection with the request of the Commerce Department for comments on certain issues related to electronics recycling.

Global is a full service end-of-life electronics recycler with processing facilities in Florida, Nevada and South Carolina. The reply comments contained herein represent the views of Global. Contact information is set forth below.

The focus of our reply comments is the issue of “collection and the role of the government in collection” and “financing.”

Global believes that the Federal government can play a useful role in facilitating the development of a healthy and stable end-of-life electronics recycling industry. The role of the Federal government should, however, be limited.

Much attention has been focused on the creation of Federal standards, including uniformity in defining “electronics” products and potential Federal statutes regulating the disposal of hazardous electronics materials. While these approaches are worthy of evaluation, there is a parallel need to ensure that a stable and strong private end-of-life recycling industry is allowed and encouraged to develop. That is the focus of these comments.

The Federal Prison Industries (trade name: Unicor) (hereinafter “FPI”), is a government corporation operated by the United States Department of Justice that unfairly competes with private industry in many areas, including the electronics recycling arena. FPI receives preferential awards from the government without a competitive bid process. It is not held to the same standard as private companies with regard to contracts with Government agencies. In addition, FPI compensates its prison workers at the rate of between \$0.23 and \$1.15 per hour, pays no local, state or Federal taxes, is not subject to OSHA regulations and does not provide any fringe benefits to its prison workers.

FPI claims to be “EPA Approved.” This approval does not exist. FPI also claims to be one the companies that will participate in the EPA READ Program. The EPA READ solicitation is a 100% “small business” set aside. FPI has sales of over \$600 million per year and should therefore not be allowed to claim status as a “small business.” Even if FPI takes the position that its prison laborers do not constitute “employees,” they nevertheless are an indisputable part of FPI. Furthermore, FPI’s sales figures disqualify FPI from participation in the EPA READ Program.

The competitive advantages enjoyed by FPI are directly contrary to our free market system and threaten the stability of electronics recycling companies and their employees.

The electronics recycling industry is in its infancy. The Commerce Department properly recognizes the vast stream of electronic waste that is likely to flow for many years to come, and the need to address disposal and recycling issues to protect the competitiveness of U.S. businesses and products in the world marketplace. For recyclers to rise to this challenge, and for recyclers to address the need of private enterprise for efficient, cost-effective and environmentally sound end-of-life electronics recycling, an environment must exist in which an infrastructure of private recyclers is fostered. As long as FPI is allowed to compete unfairly and exploit cheap prison labor, it will continue to obtain government contracts and commercial contracts at the expense of private industry. As long as FPI is subsidized with taxpayer funds to the detriment of small business, a level playing field will not exist in the electronics recycling industry. This is not simply unfair, it has the harmful effect of inhibiting the ability of private recycling companies to invest in improving technology, to build stable work forces, and to otherwise grow and position themselves for the long-term. Put simply, FPI is standing in the way of the development of a strong and stable end-of-life electronics recycling industry.

More than 130 members of the United States House of Representatives have co-sponsored the Federal Prison Industries Competition in Contracting Act now being considered in Congress. We urge the Administration's support of this legislation. We urge reform aimed at ensuring that the competitive advantages enjoyed by FPI are eliminated, that prison labor is not exploited so as to unfairly compete with private companies, that a level playing field is created, and that private electronics recyclers are afforded every opportunity to grow and foster a stable pool of reliable hard-working employees.

Respectfully,

Global Investment Recovery, Inc.

By: /s/
Michael J. Golub
Managing Director
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Tampa, FL 33619
(800) 886-8086
(813) 620-1507
(813) 664-0180
www.girpm.com

Technology Administration

Hall Radio and TV, Inc.

Email Received on 10/23/2004

Ms. Daly:

I have been in consumer electronic sales and service for over 37 years in Camden, SC. We are dealing with 4000 to 5000 lbs. of old consumer electronics per month. I think there needs to be a fee charged when a new product is sold with some reward to get that reward to the company that can recover and recycle the product. Otherwise you will see small town electronics dealers like us have to aid the big stores like Best Buy, Circuit City, Wal-Mart and Sears. They are getting the bulk of the sales thus putting the problem out there. We servicing dealers are checking the product, finding it not practical to repair and having to also deal with the time and expense of getting rid of it. If you do not put some form of reward to the recovery and recycling of this product it will be dumped by the road or in stream and rivers where it will be more of a problem than in our local landfills, which will no longer take it. I believe service dealers like me have a lot of information to give this topic. I just want someone to help me get rid of the equipment without damaging the environment and on a level playing field with my competitors. You can do it and we can help.

Thanks,

Ronnie Bradley

Hall Radio and TV Inc.

1114 Little Street

Camden, SC 29020

Hennepin County (MN)

Email Received 10/15/2004

Dear Ms. Daly,

I am responding on behalf of Hennepin County to the Department of Commerce's request for comments on electronics recycling.

Hennepin County, Minnesota, has operated a consumer electronics recycling program since 1992. The program has grown to be one of the largest government-run programs in the country. In 2003, the county managed 1,486 tons of household electronic wastes (98,118 units). Our responses reflect the county's hands-on experience collecting and managing electronic wastes.

1) What products should be covered?

To start a system, we suggest that televisions, computers and peripherals, printers, laptop computers, and telephones (cellular and cordless) be included. We estimate that these products currently make up 80% of the total electronic units collected in the county's program.

These products may contain lead and other heavy metals, and therefore are assumed to be hazardous. Research conducted by Dr. Townsend, University of Florida, provides evidence that most of these products leach lead above the regulatory limit (Townsend, et al, 2004, "RCRA Toxicity Characterization of Computer CPUs and Other Discarded Electronic Devices," University of Florida, Gainesville, FL, July 15, 2004.)

2) Actual collection methods?

Collection methods may vary depending on the product characteristics. For example, the collection of phones would require a small amount of space. However, televisions and computer monitors are often large, heavy and bulky. Their collection poses safety and space issues. In addition, reuse options are limited if the products are not handled delicately and packaged to prevent damage during transport.

A system to collect electronics should be flexible and reflect the waste services offered throughout the regions and states. It would use a combination of private and public collection opportunities.

Hennepin County offers a variety of opportunities for residents to recycle electronics:

Two permanent drop-off facilities. These facilities also serve as drop-off centers for other problem materials and recyclables. In 2003, 52.4% of the program's electronics, by weight, were collected at the permanent facilities.

The county partners with the City of Minneapolis, who picks up electronics from its solid waste and recycling customers. This successful partnership brought in 32.2% of the county's electronics tonnage last year.

Event collections, either in conjunction with household hazardous waste events or city recycling drop-off events. In 2003, 15.4% of the electronics, by weight, were collected at events.

After the electronics are collected, they are consolidated at PPL Industries, who is the county's vendor for dismantling the units.

3) Financing methods

The scope of products in the system will affect the financing requirements.

Hennepin County supports a financing system that does not rely on end-of-life fees.

4) The role of governments in electronics recycling

Some local governments will want to be involved in electronics recycling, as Hennepin County has been. However, other local governments do not have the resources or desire to become involved. The system should be flexible to accommodate a variety of options.

Technology Administration

Please contact me if you have any questions about the Hennepin County program.

Regards,

Amy Roering
Hennepin County Environmental Services
417 North Fifth Street, Suite 200
Minneapolis, MN 55401
www.hennepin.us

Comments of
Hewlett-Packard Company
On
Electronics Recycling

69 Fed. Reg. 61804 (October 21, 2004)

Thank you for the opportunity to provide the comments of Hewlett-Packard Company (HP) to the Department of Commerce on the issue of electronics recycling. HP is a technology solutions provider to consumers, businesses and institutions globally. The company's offerings span IT infrastructure, personal computing and access devices, global services and imaging and printing.

HP supports efforts to increase the recycling of our products as a means of conserving resources and promoting sustainable development. We have extensive experience in this regard. As a leading company in the global marketplace, HP has long been involved with efforts in Europe and Asia to establish sustainable electronics recycling systems. In the United States, HP has been an active member working with the industry, states and the United States Environmental Protection Agency (EPA) on developing a national strategy for electronics recycling. In 1987, HP established the Americas Product Takeback group, which now provides end-of-life recycling services for computer and related electronics products to HP entities and customers in the United States and Canada. Today, HP, along with their strategic partner Noranda Recycling, operate state-of-the-art facilities in Roseville, CA, Nashville, TN and Brampton, Ontario Canada, which recycle a total of 3.5 million pounds of material per month. As part of our Planet Partners program, HP rewards consumers for computer hardware recycling with an "e-coupon" of up to \$50 towards the purchase of new HP products at HP Shopping (www.HPshopping.com). Initiated in February of 2003, this program is designed to encourage and reward the environmentally and socially responsible recycling of consumers' old computer equipment. Recently, our leadership in recycling was recognized by EPA Region 9, who awarded HP its 2003 Environmental Achievement Award for HP's "exceptional work and commitment to the environment." HP has also established a goal to recycle 1 billion pounds of electronic material by 2007, and our recent pilot with Office Depot succeeded in collecting over 10 million pounds of electronic products free of charge to U.S. consumers in just six weeks. In short, HP has the experience and expertise necessary to assist the Department of Commerce and the U.S. Congress in establishing a sustainable national strategy to increase electronics recycling in the U.S.

In addition to implementing leading recycling programs around the world, HP has an active design for the environment (DFE) program. Under this program, HP design teams work to reduce the environmental impact of our products by making them more recyclable, integrating recycled content in new products, reducing materials of concern, improving energy efficiency, and undertaking other initiatives. For more information on HP's efforts and achievements on environmental sustainability, see <http://www.hp.com/hpinfo/globalcitizenship/environment/index.html>. Additional information on HP's corporate citizenship activities is available in HP's 2004 Global Citizenship Report, which is also available at the above website.

HP is interested in working with governments and other stakeholders to establish a framework for US electronics recycling that draws on the lessons learned from similar efforts around the world to create a sound, effective, efficient, low cost, flexible solution that manages end of life electronics products in an environmentally sound manner. We appreciate the leadership of the Department of Commerce, and specifically the Technology Administration, in seeking solutions to the challenge of increasing electronics recycling in the United States.

The Department of Commerce has requested comment on four specific issues.

1) Definition of covered products

HP believes in resource conservation and in designing a solution that provides the most efficient mechanism to produce the most impact. Accordingly, a national solution should begin with an identifiable subset of products. Initially, the scope of a national solution should focus on cathode ray tube (CRT) products (televisions and computer monitors). These video

display technology products have been identified as a resource burden in landfills and are restricted from disposal in municipal landfills in certain states. In addition, these products can be recycled and turned into useful commodities for use in new products.

HP recommends that the U.S. start with a limited scope of products rather than attempting to address the universe of all electronics products at once. Given the complexity and expense of implementing a national recycling system, the U.S. should start with a focused scope of products and adopt a “walk before you run” approach. The U.S. should gain experience with implementing a recycling solution for CRTs first, so that it can acquire expertise and develop an infrastructure to cover these products.

HP also recommends that the scope of products should be limited to households or individual consumers (including home businesses), and not apply to covered products from businesses, governments, and other large institutions. While HP already provides recycling opportunities to its household customers through our voluntary Planet Partners program, including our mail-back program and retail collection pilots, the perception is that individual consumers or households lack convenient recycling options. To address this perception, HP would support legislation that establishes an appropriate framework for a recycling solution that would ensure that households or individual consumers can conveniently recycle covered products.

In contrast, recycling opportunities are readily available to businesses or other large entities, and these entities may already be under legal obligation to recycle these products due to applicable state or local waste management regulations. Managing the disposition of older equipment is an ordinary cost of doing business. Moreover, recycling services are often incorporated into the business customer’s purchase of new equipment, in terms of recycling the equipment being replaced or providing for future recycling of the new equipment being purchased. Recycling of business equipment is also effected through products returned from leasing arrangements. HP provides recycling solutions to business entities as a customer service and to attract new customers, and other leading IT manufacturers do the same.

Manufacturers of covered products should not be compelled to subsidize the recycling and waste management costs of other businesses and institutional entities, particularly as these firms and entities already have ample recycling opportunities available to them and are subject to waste management regulatory constraints that are not imposed on households. As stated above, HP already offers recycling services to business and other large customers, and we often compete with other manufacturers and third-party recyclers to provide these services. For these reasons, electronics recycling legislation or government intervention should not disrupt the competitive marketplace that has emerged for the recycling of products from businesses, governments, and other institutions, and the scope of covered products should be limited to products from households or individual consumers.

2) Collection and the role of government in collection

HP has experimented with several types of approaches to collection. In the U.S., HP has been involved with efforts that have tested several approaches and we have put into practice a few of our own. Some of the different methods we have tested are: charity drop off and collection; one-day events at retailer sites; one-day events at local municipal waste facilities; shopping mall drop off locations; mail back programs; established retail collection sites; and regularly scheduled municipal collection events. Based on this experience, we believe that a variety of approaches will be necessary to provide collection options for households and individual consumers throughout the country. (As stated above, we use the term “consumers” to mean households, individual consumers, or home businesses.) A “one-size-fits-all” approach is unlikely to provide an efficient, workable solution to the collection of electronic products from households. HP supports a collection system that allows for flexibility and a variety of options to facilitate designing collection systems that make sense and meet the diverse needs of those that are being served.

In implementing these various options, we recognize that manufacturers can and should play a role. We further believe that state and local governments can play an important role in the collection and recycling system, and that consumers also have an important and necessary role to play. Accordingly, our proposal calls for a sharing of responsibilities among governments, manufacturers, and consumers.

The state may elect to establish a specified number of regional consolidation points. Local governments who choose to collect covered products from households would collect and consolidate these materials at the state designated centers. Manufacturers would be required to pick up from these centers truckload quantities of their own brand products free of charge and recycle these products in an environmentally responsible manner. Options for consumer participation, as discussed below, would be made available to facilitate the collection process. We believe that this approach presents a balanced and reasonable approach for engaging state and local governments in the collection system in a way that limits

their costs and requires manufacturers to share in the burden. Importantly, this option would not exclude other collection options that a municipality might wish to follow, such as established collection days for local residents. Nor would it exclude other entities that might wish to establish collection events or services of their own for household and individual consumers. Whether the options include retailers offering collection as a one time or regular event, charities offering to accept certain second hand product for refurbishment or resale, or manufacturer recycling services made available to households and individual consumers, such as HP's Planet Partners return and recycling service (www.hp.com/recycle) and related manufacturer promotions, our proposal would allow the flexibility needed to allow all of these and more.

As indicated above, it is unlikely that any "one size fits all" approach could offer efficient recycling for all U.S. households and individual consumers. Accordingly, HP believes that federal legislation should encourage, and not discourage, the development of a diversity of recycling options for households and individual consumers in order to develop a sustainable and environmentally responsible recycling infrastructure in the United States.

3) Financing collection, transportation and recycling, financing for orphan products, financing historical products versus future products, and the role of government, the electronics industry, and intermediaries in financing

HP supports a solution in which the manufacturer of a product is responsible for managing the recycling of the product at its end-of-life, and would internalize these costs like other costs of doing business. Under these circumstances, companies would have both the potential to control these costs and the incentive to improve efficiencies over time—through product design, investments in recycling technologies, promotions to customers, and other market-based means. Companies could act individually, or in partnership with other companies of their choosing, to compete in providing recycling services and incentives to consumers and in developing recycling technologies. This type of market-based approach has the best prospect of creating the most efficient and flexible recycling solution, driving costs down for consumers.

This approach calls for the adoption of framework legislation that would allow for a diversity of collection and recycling mechanisms in a low-cost, convenient, and non-bureaucratic manner. Retailers, governments, and others could offer collection and recycling services to their customers or constituents, but they would not be required to do so. Retail establishments could partner with product manufacturers as a means of attracting customers to their store, just as HP partnered with Office Depot during the summer of 2004. Charities or others would have the flexibility and incentive to make arrangements with product manufacturers to serve as collection points. Once framework legislation is adopted, these private sector agreements could offer consumers a range of collection options, without extensive government involvement. Should state or local governments choose to offer collection services to their constituents, they would be free to do so, and HP would be willing to pick up our products in truckload quantities free-of-charge from centralized consolidation points. The role of government would otherwise be limited to oversight and enforcement. Consumers also have a role to play in potentially bearing the costs of higher product prices, properly returning products to designated collection locations, and through other means.

Our goal is to create an approach that is fair and efficient, while also enabling market forces to drive costs down. For example, HP offers an "e-coupon" discount for consumers who utilize HP's recycling services under the Planet Partners program, whereby the consumer receives a substantial discount off the purchase of a new HP product. Retailer and other promotional events have also elicited positive consumer responses. We believe that this type of market-based approach is the best structure for effective recycling programs for households and individual consumers.

One financing method that is not acceptable to HP is a unitary system based on fees at the point of sale. Based on HP's experience in California and some European countries that have adopted a fee approach, we have learned that these types of systems can be substantially more expensive than a solution based on shared responsibility – up to three times more expensive. The experience in Europe has also proven that these systems are less efficient, less competitive in the provision of recycling, and so result in a more costly system for consumers. Fee approaches also provide no incentives to manufacturers to invest in improved product performance or environmental advancements. Fee systems will likely lead to additional government programs required to administer collection and disbursement of the fee, which would likely be less efficient than programs implemented by the private sector. In addition, fee systems raise questions about whether the collected fees would be used only for recycling purposes. The fee structure also does not provide flexibility. Instead, the fee structure is rigid and fees will likely remain the same or increase, while product prices for electronics may continue to decrease. Moreover, a nationwide fee system would establish a new national tax that would increase the price of technology products and be inconsistent with the Administration's broader goals of lowering the tax burden and promoting the use of technology products by all Americans.

Similarly, mandated implementation of collective measures within industry, where individual companies lack the ability to compete or the incentive to improve product design, recycling technology, and service to consumers, should also be avoided. Therefore, framework legislation should call for individual responsibility, while enabling companies the flexibility to implement their obligations through collective means and through market mechanisms such as those discussed above.

4) The role of the federal government in creating a national recycling plan

HP recognizes that the federal government can play an important role in a successful recycling solution. First, the federal government should enact sensible legislation to establish a framework for flexible, efficient recycling and one that provides incentives to the private sector. This legislation would create a set of uniform national rules that would preempt state and/or local programs to ensure a level playing field for all participants. HP believes that a patchwork of state and local laws would hinder the development of an efficient recycling infrastructure, needlessly raise costs, and cause consumer confusion. A single national framework that provides for flexible implementation is preferred. We believe that this framework legislation would set the general obligations of product manufacturers and others, in accordance with our recommendations above. Such legislation would be relatively simple, and certainly less complex than legislation establishing new taxes, fees, government programs, or collectively run organizations.

Second, the federal government should establish a regulatory system that facilitates the efficient, environmentally sound movement of CRTs for recycling. A key barrier to the efficient recycling of electronic products is the unnecessary burdens and uncertainty of the current waste regulations. In short, the standard “waste” regulation programs are not suitable for used electronics. Used electronics are intact, finished products that pose little risk to human health or the environment simply because the user no longer desires to continue using the product. Under some state and federal regulations, however, various components of the electronic products may trigger “hazardous waste” regulations that were designed for the handling of manufacturing waste streams. Because these waste regulations are not generally designed for the recycling of manufactured products, these regulations can have the effect of preventing implementation of sensible recycling options for used electronics products. Even where recycling is still feasible, this hazardous waste classification can operate to increase costs unnecessarily by requiring different, more expensive means of transporting, handling, and processing these products even though these products when destined for recycling, just as when new and destined for distribution, can be and are safely and properly handled outside this regulatory scheme. The potential for varying regulations from state to state can also serve as a barrier. A proposed rule of the U.S. Environmental Protection Agency (67 Fed. Reg. 40508 (2002)) is a positive first step in addressing some of the regulatory barriers, but this proposal first must be finalized and then separately implemented by the states before it becomes effective in practice.

Finally, the federal government and other levels of government play an important role in enforcement in order to ensure that all manufacturers are fulfilling their share of the responsibility, that recyclers processing these products are acting in an environmentally sound manner, and that the recycling system requirements are being complied with. In order to avoid unfair competitive advantages in the marketplace, it is important for federal and state governments to enforce applicable recycling obligations on all market participants.

In addition to the federal role, states and localities may also play an important function. As mentioned above, states and local governments may provide collection opportunities for consumers in their jurisdictions, just as these governments often conduct programs for other common recyclables held by households in their communities. States and localities may also play a useful role in educating households about recycling opportunities in their communities. At the same time, States and localities also have the ability to require households and individual consumers to manage recyclables in certain ways through local regulation. This can be accomplished just as these governments prohibit disposal of certain materials into the local sewer system or restrict the materials that can be placed into the municipal trash or provide incentives to households to encourage water and energy conservation.

5) Recycling Scenarios

In addition to the four issues addressed above, Commerce has also requested submission of specific recycling scenarios that would enhance U.S. competitiveness and encourage resource conservation. HP supports a national electronics recycling solution that accomplishes the following goals:

1. Reduce the amount of material flowing to landfills.
2. Allow for flexibility to achieve efficiency and reduce overall costs
3. Avoid burdensome administrative and/or operational overhead.
4. Ensure a level playing field.

5. Increase environmental sustainability of products and recycling solutions.

As stated above, HP supports reasonable federal legislation that would require each manufacturer to establish a means for household and individual consumers to recycle their discarded products. This framework legislation should enable companies to perform their responsibilities in a flexible, efficient manner of their choosing. For example, manufacturers should be able to work voluntarily with local governments who establish collection programs, or to set up collection programs with various options – mail back, retail return, drop off events, municipal collection, and other approaches. Each of these alternatives should be able to be employed concurrently, and companies should have the discretion to operate individually, or in partnership with other companies while remaining in compliance with applicable competition laws. While HP believes that point of sale fees are not a fair or efficient means of establishing a recycling program, we could accept a solution under which companies that choose not to implement a reasonable recycling program for their household and individual consumer customers would be required to pay a fee. However, it is critical that manufacturers have the opportunity to implement their own recycling programs and not be mandated to enter into a rigid fee-based solution or a state authorized manufacturer consortium.

This approach would enable companies to innovate and achieve greater efficiencies in the design of new products, in the establishment of recycling facilities and new recycling processes, and in the development of collection and recycling services for their customers. In addition, the approach enables companies to take advantage of market forces to improve the overall system over time. By allowing for individual or collective action, companies have the flexibility to determine the most efficient recycling system that satisfies their business and competitive needs. Based on our experience with recycling programs around the world, the type of approach described above will foster innovation and competition in both product design and recycling. Therefore, shared responsibility is preferable for both business and consumers than fee-based approaches or systems that establish monopolistic consortia.

Another important element of federal legislation should be a requirement that recycling must be conducted in compliance with all applicable laws. HP operates its recycling facilities in compliance with the highest standards, and we firmly oppose the improper management of used products. Accordingly, we support the requirement that electronics products being recycled be managed in a manner that complies with applicable environmental and safety requirements.

HP has drafted model legislation to achieve these goals, and we will submit a copy of this document with the Department of Commerce shortly.

HP strongly opposes mandated fees, which will substantially increase recycling costs and reduce competition. HP endorses a solution that requires a manufacturer to provide for the recycling of its own branded products for households and individual consumers. Implementing legislation should create a level playing field and allow manufacturers to select collaborative or individual operations to take back and recycle their discarded products from households and individual consumers. The legislation should assign responsibility to each manufacturer to create recycling options only for its own brand products. This type of solution would allow manufacturers to manage their recycling costs as they do other product costs (how much to charge consumer, whether visible) and would create an incentive for better design by allowing manufacturers to receive design for recycling (DFR) benefits and effects and achieve economies in the recycling of their own products.

* * *

HP looks forward to working with the Department of Commerce, the U.S. Environmental Protection Agency and Congress to establish a national framework for electronics recycling.

Supplemental Comments
Of the
Hewlett Packard Company
On
Electronics Recycling

November 24, 2004

Hewlett-Packard Company (HP) is pleased to submit these supplemental comments to the Department of Commerce on electronics recycling. HP previously filed comments on October 27, 2004, and we are writing now to address some additional questions posed by the Department.

The questions raised by the Department are as follows:

1. Can you give me a quote for HP's cost of compliance with WEEE/ROHS or California or Maine legislation? For example, I've heard that HP has 140 people working on compliance with ROHS. I would like to include something in the report about the cost of compliance for U.S. companies with varying e-cycling legislation.
2. You have stated several times, and repeated in HP's written comments, that HP has found that fee based systems in the EU are less efficient and more expensive than non-fee based systems like Norway's. Has HP or another organization done a study supporting this that you can share with me? If not, can you give me any information that supports this?

In addition, Commerce has raised an additional question in conversations with us regarding the potential for design incentives resulting from the structure of a recycling system.

Compliance with WEEE/ROHS

The WEEE Directive established a broad framework for the recycling of electronic and electrical products, and the member states of European Union are now in the process of "transposing" this directive into national law. As a result, it remains unclear at this point as to how various countries will interpret and implement several key provisions of the WEEE Directive. HP does have some experience with the costs of complying with several existing recycling laws in Europe, and we provide some information on these programs below.

The ROHS directive is a separate directive that mandates the phase-out of certain hazardous substances in electronic products by July 1, 2006. This phase-out is subject to certain exemptions that were written into the text of the directive, as well as additional exemptions that are being considered by a technical review process established in the directive. Other jurisdictions around the world are contemplating similar restrictions on the use of certain substances, and California has incorporated the requirements of ROHS in its recycling fee legislation.

The legal requirement to reduce or replace the substances identified in the ROHS directive, including lead in solder, is a major undertaking for the electronics industry as a whole. More information on HP's efforts to achieve compliance with the ROHS directive is available at:

<http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/materialuse.html#RoHS>. The complex design changes associated with phasing out these materials, along with a variety of other factors – the global nature of the supply chain in electronic products and components, and the environmental tradeoffs associated with substituting materials – makes it imperative that governments proceed cautiously in adopting new substance restrictions. It is also critical that future efforts to restrict the use of substances in electronic products be harmonized globally in order to prevent barriers to trade.

HP's Experience in California

The experience to date in California concerning the implementation of their electronics recycling fee system, SB 20 and SB 50, confirms HP's belief that fee-based systems are highly inefficient and result in more costs to consumers than more flexible, effective systems. We also believe that the California experience to date has shown that a fee imposed at the state level may not be applied fairly to all products and all types of sales.

The cumulative costs of the California system are proving to be significant for both the state government and for manufacturers of covered products. As a preliminary matter, the State of California has been required to extend a \$30

million loan from other programs to the Integrated Waste Management Board (IWMB) to jump-start the electronics recycling program. This loan must be repaid before payments to recyclers and collectors can be made. Accordingly, even before any products have been collected or recycled in the state, the fee-based approach has resulted in significant expenditures.

The size and administrative costs associated with the collection and disbursement of fees on covered products have proven to be substantial. In fact, the California Board of Equalization (BOE), the agency that collects and administers the state sales tax, has identified its e-recycling program as the largest fee program in the State of California, second in program size only to the collection of the state sales tax. The BOE anticipates that they will need to hire over 75 additional staff with an estimated annual cost of over \$5 million dollars for revenue collection management. This staff and costs are limited to administration of the fee, and excludes any staff or other funding needed to address environmental issues, management of the recycling program, and disbursements of payments to recyclers.

In addition to the costs being incurred by the state government in California, the fee requirement has resulted in the imposition of significant costs on HP and other companies. To comply with the new fee requirement, HP been required to notify all of its retail partners regarding covered products, and to change its direct sales systems to apply the fee to sales into California. We believe that other companies are experiencing similar costs.

Finally, the experience in California raises the question of whether a state-imposed fee can be applied equally to all covered products and all types of sales. Specifically, it is uncertain whether state recycling fees can be applied to remote sales (i.e., sales by an entity that lacks a nexus to the state). In fact, the BOE, which possesses significant expertise in the collection of the sales tax in California, stated publicly on October 7, 2004 that it has no way of enforcing the collection of the fee on internet sales from retailers who lack sufficient nexus with or presence in the State. BOE reiterates these points in a list of "Frequently Asked Questions," in which it states that out-of-state sellers and those not required to register with the state do not need to collect the fee; in those cases, the fee would presumably be owed by the consumer. See <http://www.boe.ca.gov/sptaxprog/ewfaq.htm#two>. Because a substantial percentage of computers are sold remotely over the Internet or through other means, this fact raises the question of whether a significant portion of covered products subject to the fee that are sold in the State will not be subject to the fee.

Maine

HP does not have any data concerning implementation of the Maine law. Because the law has only recently been enacted, and no regulations and only limited guidance has been provided, it is too early to comment on the costs of complying with the Maine law.

European Experience

HP's position in support of a flexible means of internalizing recycling costs, and in opposition to mandatory uniform fees, is based on our experience with various recycling programs around the world, including Europe. Based on this experience with implementing recycling programs in various countries, we have concluded that fee-based programs are dramatically more expensive overall than approaches in which manufacturers of products control their costs and have the flexibility to manage their costs.

HP's internal data demonstrates that government fee programs and mandatory industry consortia are less efficient than competitive, market-based implementation of recycling programs. The chart below summarizes the results of our experience. Due to the proprietary business data upon which the assumptions and numbers are based, the costs are reported in the form of ranges.

Product Takeback Financing

Financing Mechanism	Government Fee	Collective Industry Implementation	Individual Producer Responsibility
Cost per unit sold (estimated range)	\$8.50 – 10.50	\$8.60-16.00	\$2.40-4.50

The primary differences in these costs stem from several factors, including the following:

- In our experience, government and collective systems tend to be significantly more costly in terms of administration. Large, bureaucratic systems tend to have higher overhead costs and little incentive to restrain these costs; in contrast, internalizing these costs as part of a business will keep these costs in check and enable companies to manage these costs as they do other aspects of their business.
- Industry or consortia system adds several layers to the distribution of funds, therefore increasing the fee to consumers. In HP's experience, when the fee passes through multiple entities, the cost to consumers increases. Each time a different entity, government or consortia, handles the money the transaction, handling and administrative costs must be added to the fee thereby unnecessarily increasing the final cost to consumers. As HP examines the different financing mechanisms, we evaluate the cost of each system to our business and our consumers. HP believes that the individual producer responsibility system offers consumers the lowest cost alternative, over government run or industry run fees at point of sale. Fee systems and monopolistic industry consortia also tend to accumulate large financial reserves, and these add to the overall costs of the system.
- Competition in the market for recycling services will help reduce recycling costs and promote improvements over time. Competition is a fundamental principle of American economic policy, and these same considerations are at work here. A government or collective system will likely lack the ability to ensure cost-effectiveness and bring the power of the marketplace to reduce costs and increase efficiency in the delivery and quality of these services, as well as drive innovation and improvements in recycling technologies. A competitive system, in contrast, where individual companies can work either alone or in partnership with others, will have the greatest prospect of bringing competition to the recycling market.

HP's experience has shown that a system will not be the most efficient unless there is competition in the system. A good example is the German Packaging Take Back system, known as the German Green Dot System (DSD). Before the summer of 2001, the DSD was a monopoly. Now, competition has been introduced in the DSD program. As a result, the cost of participation in DSD has decreased by 30 percent and was expected to drop another 30 percent in 2002. In addition to the introduction of competition and the resulting efficiency gains, DSD was also willing to address changes to internal administration that led to a further lowering of costs to the participants.

We recognize that some other stakeholders may not share our perspective regarding the desirability of more flexible, market-based approaches to implementing recycling. However, we believe that Commerce should not recommend, and the U.S. should not adopt, a system that precludes the ability for companies to implement their recycling obligations in a way of their own choosing. A "one-size-fits-all," rigid, monopolistic approach is not the best solution for American industry, consumers, or the environment.

Design Incentives

HP's experience has shown that being responsible for, and involved in, the recycling of our own branded products offers the potential for incentives for improved design and ultimately greater efficiency in the recycling system.

A system where HP is recycling its own brand products offers the opportunity to provide information and lessons that can be applied in the design of new products. Design changes include design changes to improve the ability to recycle, dismantle, or shred the product at the end of its useful life. For example, decreasing the time needed to dismantle a product can result in significant costs savings. In a system where a manufacturer can internalize the costs of recycling their products, manufacturers can achieve cost efficiencies from improved product design. Such an incentive is eliminated, however, where there is a fixed fee and no opportunity for manufacturers to benefit from design innovations related to the recyclability of their products. If the costs are fixed by the government in a system of uniform fees, all products are assessed the same fee and there is little or no opportunity to realize the benefits of design changes that lower the costs of recycling.

Some other companies disagree with this view, or argue that a system that entails sorting by brand would be prohibitively expensive. HP does not share this perspective. First, as stated above, we believe that a system should be structured in a way that provides for flexibility and the opportunity for companies to recycle their own products and attempt to achieve a design advantage; establishing a monopolistic system that precludes this opportunity is not in the best interests of the environment or economic efficiency. In other words, the potential for improving product design should not be eliminated by establishing a mandatory, uniform system without providing companies an opportunity to test innovative approaches. Second, allowing companies to offer consumers their own recycling services will not necessarily involve costly sorting by brand. The market may evolve in ways that provide consumers incentives to return specific brand products to particular retail establishments, thereby creating an efficient system for the return and recycling of their own brand products. Third, enabling companies to be involved in the recycling process may provide incentives for companies to provide feedback to their product designers on ways to facilitate recycling, and may also provide incentives for the use of recycled content in

newer products. Finally, companies can also benefit from design innovations by receiving products back after the expiration of a lease term, or by receiving their own products back from a commercial or institutional customer.

* * *

We appreciate the opportunity to provide our views. Please contact David Isaacs at 202-378-2513 or david.isaacs@hp.com for more information.

Technology Administration

October 27, 2004

Ms. Laureen Daly
Office of Technology Policy
Technology Administration HCHB 4817
1401 Constitution Avenue, N.W.
Washington, DC 20230

Dear Ms. Daly:

I am writing today to provide you with IBM's comments in response to the Technology Administration, Office of Technology Policy's request for comments on issues regarding product recycling. IBM has been a global leader in computer recycling for more than 15 years. The company began offering recycling solutions, primarily to commercial clients in Europe, in 1989. By the late 1990s, we began to extend offerings to small businesses and households. In November 2000, IBM became the first computer manufacturer to offer a product recycling service in the U.S. for end-of-life PCs and other information technology equipment generated by households and small business users, a leadership action that was eventually followed by others.

IBM has recovered more computer waste than any other computer company in the world. Since 1995, when IBM first began providing the volumes of product waste it collected and recovered (resold, refurbished, or recycled) in the company's annual corporate environmental report, IBM has documented the collection and recovery of more than 1.06 billion pounds (481 million kilograms) of product waste. In 2003, IBM collected and recovered more than 68.8 million kilograms of product waste worldwide (including customer lease returns, customer return / recycling programs, and some IBM internal product scrap). This includes over 1.75 million PCs and monitors, more than half of which were generated here in the U.S.

IBM participates in numerous collective recycling initiatives worldwide in countries like Belgium, Switzerland, Japan, Norway, Sweden, and the Netherlands. In 2003, IBM worked cooperatively with legislators, the California Environmental Protection Agency, environmental organizations, and many other manufacturers to pass electronic waste recycling legislation in California that established this country's first comprehensive recycling solution for electronic products. Through all these experiences, IBM has developed an in-depth perspective regarding what types of product collection and recycling programs are effective, and conversely, what types of programs are not. As such, we feel we are very qualified to comment on the issues posed in your request for comments:

Definition of covered products

IBM supports the concept of recycling all Information Technology (IT) products. However only a small percentage of IT product types are likely to end up in households and will need to be covered by a national electronics recycling solution. Additionally, we realize that it may be necessary to limit the scope of any electronics recycling system in the early stages in order to focus on those products for which recycling will garner the greatest environmental benefits. IBM supports development of a national recycling system covering the scope of products identified and agreed by the participants of the National Electronic Product Stewardship Initiative (i.e., desktop personal computers, mobile notebook computers, computer monitors, desktop personal printers, and televisions).

Collection and the role of government in collection

Local communities have invested significant resources in systems for collection of waste materials from households and small businesses. Consumers understand and use these systems. Duplicate systems to collect end-of-life electronic products are unnecessary and will likely be very expensive. As such, IBM supports use of existing municipal waste collection systems to collect used IT products from households and small businesses. However, collection need not be limited to municipalities. As such, IBM would also support voluntary collection initiatives by retailers, manufacturers, charitable organizations and other groups to help facilitate collection.

Financing collection, transportation and recycling, financing for orphan products, financing historical products versus future products, and the role of government, the electronics industry, and intermediaries in financing

IBM supports an Advance Recycling Fee (ARF) to finance the collection, transportation, and recycling of electronic products (including orphaned, historical, and future products). Similar systems are already in place in several European countries, and they have been demonstrated to be effective and relatively low cost, while providing little disruption to new product sales.

IBM believes that the ARF represents the most fair and equitable process for financing the collection, transportation and recycling of electronic products. We are also convinced that the simplicity of the ARF approach will lead to the lowest cost recycling system in the United States. In September 2003, the state of California passed legislation establishing the first comprehensive statewide recycling system for electronic products in the United States. The California system, which garnered widespread support from numerous stakeholders, finances all costs associated with collection and recycling of products with a \$6 -\$10 advanced recycling fee collected by retailers and manufacturers selling direct at the point of sale on video display products. IBM believes that the California legislation can serve as a model for financing a national electronic product recycling system.

The role of the federal government in creating a national recycling plan.

In the United States, IBM has actively pursued the development of voluntary industry-wide recycling solutions. In most instances, voluntary actions by manufacturers, retailers, and consumers result in more efficient and lower costs solutions to environmental problems. However, given the large number of stakeholders involved in this issue and their competing interests and priorities, today there is no agreement among all involved parties on the details for implementation of a voluntary recycling solution. As a result, legislation may be required to establish an improved electronic product recycling system. To avoid different state-by-state product recycling systems throughout the United States, IBM would support efforts to develop national legislation on this issue.

Thank you for the opportunity to provide comments. Please contact me if you have questions regarding IBM's views on this important issue.

Sincerely,

Timothy M. Mann
Program Manager,
Product Environmental Policy
IBM Corporate Environmental Affairs